

## CLAIMS

1. A process for purifying human interferon beta from a recombinant human interferon beta-containing culture comprising performing affinity chromatography and cation exchange chromatography,  
5 wherein the affinity chromatography comprises:  
adsorbing the interferon beta-containing culture to an equilibrated affinity chromatography column, followed by washing with an equilibration buffer solution;  
washing the column with a washing buffer solution A of pH 6.5-7.5 containing 30-60 wt% of propylene glycol and a washing buffer solution B of pH 6.5-7.5 containing  
10 10-30 wt% of propylene glycol and 1-2M NaCl; and  
eluting a human interferon beta-containing fraction with a buffer solution of pH 6.5-7.5 containing 40-60 wt% of propylene glycol and 1-2M NaCl.
2. The process of claim 1, wherein the washing step further comprises  
15 washing the column with a washing buffer solution C of pH 6.5-7.5 containing 1-2M NaCl.
3. The process of claim 1 or 2, wherein each buffer solution used in the washing and the elution is a sodium phosphate buffer solution or a potassium  
20 phosphate buffer solution.
4. The process of claim 1 or 2, wherein a solution obtained by the affinity chromatography is subjected to diafiltration with an ultrafiltration membrane of molecular weight cut-off of 10,000 before the cation exchange chromatography.  
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5. The process of claim 4, wherein in the cation exchange chromatography, a sample obtained by the diafiltration is loaded on a column and then a human interferon beta-containing fraction is eluted at pH 5-7 by a concentration gradient of NaCl.  
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